

REMARKS

Reconsideration of this application is respectfully requested in view of the following remarks.

STATUS OF CLAIMS

Claims 1-21 are pending in this application.

OBVIOUSNESS REJECTIONS

1. Claims 1-5, 7-12, 14-19, and 21

In paragraph 3 of the Office action, the Office has rejected claims 1-5, 7-12, 14-19, and 21 under 35 U.S.C. § 103(a) as obvious over U.S. Patent Publication No. 2004/0095605 (Moro) in view of U.S. Patent No. 6,628,419 (So), U.S. Patent No. 6,381,031 (Mishima) and U.S. Patent No. 7,324,228 (Chiarabini). Applicants respectfully traverse this rejection for the reasons given below.

The Office action states that Moro discloses a data processing apparatus comprising:

a data discrimination portion which discriminates whether said input data-to-be-output is data including a small amount of information or a large amount of information (i.e. the CPU (40) determines or discriminates whether inputted information is a small amount or a large amount by measuring the amount of the data using a scale of frequency. . . . With the CPU (40) looking at these scales, it determines or discriminates a large amount of information, which is associated with the color data when judging the frequency of an image inputted into the system, and it also discriminates a small amount of information, which is associated with the monochrome data. The monochrome data is considered small in comparison to the color data when comparing how their measured frequencies of their respective density data; see fig. 7-9; paragraphs [0035], [0036] and [0042]-[0044];

Office action dated September 2, 2008 at pages 3-4. The Office action alleges that a transfer controller is disclosed by element (40) of Moro, and goes on to state:

wherein, in cases where it is discriminated by said data discrimination portion that said input data-to-be-output is data including a small amount of information (i.e. data can be discriminated or determined to be small, or monochrome, based on the determination by the CPU (40); see paragraphs [0035], [0036] and [0042]-[0044]), said transfer controller transfers said input data-to-be-output to said output portion through said plurality of compressing/expanding devices (i.e. when the data is determined to be small information, or monochrome, it is transferred to the variable-length compression/decompression processing section. This section is able to perform both compression and storage in the page memory (46). Then, the monochrome, or small amount of information, is decompressed before being sent to the printer section (3); see paragraphs [0035], [0036] and [0042]-[0044], and

wherein, in cases where it is discriminated by said data discrimination portion that said input data-to-be-output is data including a large amount of information (i.e. data can be discriminated or determined to be large, or color, based on the determination by the CPU (40); see paragraphs [0035], [0036] and [0042]-[0044]), said transfer controller transfers said input data-to-be output to said plurality of compressing/expanding devices while transferring said input data-to-be-output to said output portion (i.e. when performing compression on the color data, the color data is sent through all of the compression/decompression sections since the data goes through both the fixed and variable length compression/decompression devices. When performing the process on a multiple amount of originals scanned in to the system, the first original is printed while the other originals have the process of compression and storage being performed on the respective documents. Therefore, the feature of having the data that will be outputted being sent to the compression and expansion devices while transferring other data to be outputted to the printer portion is performed by this device. With the data being sent through all of the compression/decompression sections in the device; see fig. 6; paragraphs [0035], [0036], [0042]-[0044] and [0057]).

Office action dated September 2, 2008 at pages 4-5.

The Office admits that:

[T]he inventions of Moro '605, in view of So '419 and Mishima '031 fails to teach said transfer controller transfers said input data-to-be-output to said compressing/expanding device while simultaneously transferring said input data-to-be-output to said output portion.

Office action dated September 2, 2008 at page 7 (emphasis added). In an attempt to cure this deficiency, the Office turns to Chiarabini, stating:

However, this is well known in the art as evidenced by Chiarabini '228. Chiarabini '228 discloses said transfer controller transfers said input data-to-be-output to said compressing/expanding device while simultaneously transferring said input data-to-be-outputted to said output portion (i.e. the system of Chiarabini is similar to the systems of Moro, So and Mishima in the manner that all the inventions involve decompressing some compressed image data for further image processing.

Office action dated September 2, 2008 at page 7 (emphasis added).

However, Applicants respectfully submit that none of the cited references disclose a system that: (1) simultaneously transfers data that contains a large amount of information (e.g., color input data-to-be-output) to the compressing/expanding device and to the output portion, and (2) treats data that contains a small amount of information (monochrome input data-to-be-output) in a different way, i.e., by transferring the monochrome input data-to-be-output to the compressing/expanding device without simultaneous transfer to the output portion. Yet, assuming as correct the Office's treatment of color data as corresponding to a large amount of information, and monochrome data as a small amount of information, as these terms are used in Applicants' claims, this difference in treatment between data containing large amounts of information, and data containing small amounts of information is precisely what Applicants' claims recite.

Moro does not suggest such a different treatment of the input data-to-be-output, since it merely discloses varying the type of compression/decompression processing section to optimize this step to the type of input data. Moro states:

As is shown in FIG. 6, when monochromatic-character image data has been input to the compression/decompression section 45, a variable-length compression/decompression processing section 451 is selected to process the image data. When color image data and monochromatic-photo image data has been input to the compression/decompression processing section 45, a fixed-length

compression/decompression processing section 452 for color data and the variable-length compression/decompression processing section 451 are both selected to process the image data. For example, color image data is compressed by the fixed-length compression/decompression processing section 452 and then further compressed by the variable-length compression/decompression processing section 451. The selection of each processing section 451, 452 is made by the control of the main CPU 40 in accordance with the kind of each page of originals.

Moro at paragraph [0035] (emphasis added). Nowhere does Moro suggest simultaneously outputting and compressing/expanding for large amounts of information, and only compressing/expanding for small amounts of information.

Chiarabini et al. also does not teach any difference in treatment of the data, based upon the size of the data. According to Chiarabini, all of the data is subject to the processing disclosed in column 7 thereof, irrespective of the amount of information contained in the data. None of the other cited references disclose the type of variation in treatment of the input data-to-be-output that is recited in Applicants' claims. Applicants do not admit that the combination of reference teachings suggested by the Office is proper; however, even if the reference teachings were combined in the manner suggested, for at least the reasons given above, there is no *prima facie* case of obviousness over Moro, So, Mishima, and Chiarabini, and this rejection should be withdrawn.

2. Claims 6, 13, and 20

In paragraph 4 of the Office action dated September 2, 2008, the Office has rejected claims 6, 13, and 20 under 35 U.S.C. § 103(a) as obvious over Moro, So, Mishima, and Chiarabini, and further in view of U.S. Patent Application Publication No. 2003/0122935 (Shiohara). Applicants respectfully traverse this rejection for the reasons given below.

The Office action states:

However, Moro in view of So '419, Mishima '031 and Chiarabini '228 fails to teach binary data includes binarized color data (i.e. a bit map of color data is binarized in order to prepare a binary data table; see paragraph [0090]).

Therefore, in view of Shiohara, it would have been obvious to one of ordinary skill at the time the invention was made to have binary data [include] binarized color data in order to color data binarized to prepare binary data (as stated in Shiohara paragraph [0090]).

Office action dated September 2, 2008 at page 46.

First, Applicants respectfully submit that Shiohara fails to cure the deficiencies of Moro, So, Mishima, and Chiarabini noted above with respect to claims 1-5, 7-12, 14-19, and 21. For at least this reason, Applicants submit that the Office has failed to establish a *prima facie* case of obviousness.

Second, the Office has failed to explain why a worker having ordinary skill in this art would have looked to Shiohara for a disclosure of how to treat color data.

Paragraph [0090] of Shiohara merely states:

A color correction module 532 applies color correction processing to the RGB continuous-tone bit image data to relate the data to print colors and converts the data into CMYK continuous-tone bit image data for K (black), C (cyan), M (magenta), and Y (yellow) printing at step S14.

Nowhere does this paragraph explain why one having ordinary skill in the art would use binarized color data in the devices and processes of Moro, So, Mishima, or Chiarabini or in some hypothetical combined device or process. For this reason as well, Applicants submit that the Office has failed to establish a *prima facie* case of obviousness, and that this rejection should accordingly be withdrawn.

CONCLUSION


Applicants submit that this application is in condition for immediate allowance, and an early notification to that effect is respectfully requested. If the Examiner has any questions about this application, or believes that any issues remain to be resolved, the Examiner is respectfully requested to contact the undersigned to arrange for a personal or telephonic interview to resolve these issues prior to the issuance of another Office action.

Respectfully submitted,

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